



Monthly Operating Report

October:2022

So. Sangamon
Water Commission
November 21st, 2022

SSWC

9199 Buckhart Rd Rochester IL 62563

TABLE OF CONTENTS

SECTION	PAGE NO.
Executive Summary.....	ES-1
1. SAFETY	1-1
1.1 Safety Training	1-1
1.2 Lost time Accidents	1-1
1.3 Safety Audit	1-1
1.4 Miscellaneous Safety.....	1-1
2. COMPLIANCE, FLOWS AND LOADINGS	2-2
2.1 Compliance	2-2
2.2 Influent flows and loadings	2-2
2.3 Effluent Concentrations	2-2
2.4 Lagoon Discharge Concentrations	2-4
3. OPERATIONS.....	3-1
3.1 Events impacting operations	3-1
3.2 Emergency & Service calls.....	3-1
3.3 Emergency Call-outs	3-1
3.4 Customer Inquiries	3-1
4. MAINTENANCE AND REPAIR.....	4-6
4.1 Preventative and predictive maintenance.....	4-6
4.2 Corrective repairs	4-6
5. PROJECT MANAGEMENT & SUPPORT.....	5-1
5.1 Staffing & Training.....	5-1
5.2 Corporate Support.....	5-2
5.3 Budget.....	5-3
6. CAPITAL PLANNING	6-1
6.1 Approved CIP Projects Current status.....	6-1
6.2 Draft Capital Improvement Plan	6-1

LIST OF TABLES

TABLE	PAGE NO.
Table 2.2 Influent Concentrations and Flow.....	2-2
Table 2.3 Finished Water Quality.....	2-2
Table 2.4 Weekly Grab Sample Analysis Results.....	2-4
Table 4.1 Budget Table.....	5-3

EXECUTIVE SUMMARY

Safety. Safety is the number one priority at South Sangamon. We have instituted a monthly safety meeting for operations staff at the plant. There were no lost time accidents in the month of October 2022.

Compliance. The finished water quality was within regulatory limits and all reporting and sampling requirements were met for the month. A copy of the Operations Report submitted to the Illinois Environmental Protection Agency is available at www.sswc.us.

During the month of October 2022, the plant pumped 38.422 million gallons from the well field and 31.634 million gallons of finished water. This is 10.1 million gallons less than October of 2021.

The SSWC plant has been removed from Critical Review status.

Operations. There was 0 emergency call-outs for the month. There were numerous customer inquiry for the month.

Maintenance and Repair. For the month of October 2022, there were 31 inspections, 3 preventative and multiple corrective maintenance activity completed. There was 1 repair activities performed .

Budget. Passed at April 18th 2022 meeting.

Capital Planning.

Chatham emergency interconnect

Onsite fuel storage tanks

Detention Tank

1. SAFETY

1.1 SAFETY TRAINING

At South Sangamon we strive to provide a safe working environment for all employees. This is accomplished with daily safety meetings and open communication.

1.2 LOST TIME ACCIDENTS

There were 0 lost time accidents in the month of October 2022.

1.3 SAFETY AUDIT

No safety audits to date.

1.4 MISCELLANEOUS SAFETY

No notable safety issues

2. COMPLIANCE, FLOWS AND LOADINGS

2.1 COMPLIANCE

The finished water quality was within regulatory limits and all Bacteriological testing was completed for the month of October. A copy of the Operations Report to the Illinois Environmental Protection Agency (IEPA) is available on the SSWC website.

2.2 INFLUENT FLOWS AND LOADINGS

The total gallons pumped from the well field were 38.422 MG. The influent parameters were all within the normal range.

The influent flow and loadings are summarized below in Table 2.2

Table 2.2 Influent Concentrations and Flow								
	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Well Flow Gals (MGD).
Max.	7.4	15.2	4.2	.866	-	370	320	1.807
Min.	6.9	14.0	.39	.184	-	180	280	.628
Avg.	7.0	14.5	1.3	.242	-	337	304	1.239
Total	-	-	-	-	-	-	-	38.422

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 33.774 MG during the month with a daily average of 1.089 MG and a min/max .602/ 1.558 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	.18	3.78	7.7		0.09	0.076	1.23	200	320	5.0
Min.	0.03	2.18	7.2		0.01	0.011	0.52	80	280	1.88
Avg.	0.08	3.28	7.5		0.02	0.028	0.86	130	301	2.94
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2021 -22

Time Period	21-22	20-21	19-20
Nov-2021- Oct-2022	406,973,708	419,210,001	390,569,699
Increase for the same period last year		-12.2MG	28.6 MG

FINISHED WATER PUMPING HISTORY						
	21-22	20-21	19-20	18-19	17-18	16-17
Nov	31,181,005	32,325,040	30,877,400	30,464,000	28,617,333	30,478,309
Dec	31,391,459	31,582,311	29,703,954	31,930,000	28,808,037	32,525,530
Jan	32,322,270	31,456,987	30,073,516	28,823,375	30,556,824	30,449,215
Feb	32,451,653	30,638,842	28,797,693	28,625,431	25,617,914	27,373,232
Mar	33,909,417	33,633,244	30,339,298	31,237,000	28,217,699	30,068,363
Apr	31,991,050	33,214,211	31,542,650	28,418,249	27,110,578	29,625,797
May	37,459,417	35,932,776	34,673,848	33,045,927	33,304,196	32,120,873
June	38,496,145	37,616,256	17,414,377	33,460,303	34,040,000	39,931,402
July	38,861,790	39,001,640	44,237,066	23,742,374	41,178,722	42,164,927
Aug	36,977,913	39,953,900	39,638,063	25,018,633	35,176,238	38,760,634
Sept	32,355,302	38,935,839	38,674,095	34,234,782	34,754,000	39,896,986
Oct	29,576,287	34,918,955	34,597,739	30,769,238	30,353,482	33,506,605
	-----	-----	-----	-----	-----	-----
Totals	406,973,708	419,210,001	390,569,699	359,769,312	377,735,023	406,901,873
Avg	1.11 MGD	1.15 MGD	1.07 MGD	.986 MGD	1.03 MGD	1.11 MGD

2.4 LAGOON DISCHARGE CONCENTRATIONS

The results for the NPDES lagoon discharge permit are summarized below.

Table 2.4 Weekly Grab Sample Analysis Results

Lagoon Effluent Results						
Date	Fe (mg/l)	Mn (mg/l)	Chloride (mg/l)	Cl ² (mg/l)	pH (S.U.)	TSS (mg/l)
Oct 13th 2022	.11	.152	364	.02	7.7	<4
Minimum	.11	.152	364	.02	7.7	<4
Maximum	.11	.152	364	.02	7.7	<4
Average	.11	.152	364	.02	7.7	<4
Monthly Avg Limit	2.000	1.000				15
Daily Limit	4.000	2.000	500	0.05	6.0-9.0	30

The Chloride sample for the month, performed by the Springfield Metropolitan Sanitary District, was below 30,000 mg/l for the month of October 2022. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There was 1 incident that impacted the operation of the plant.

3.2 EMERGENCY & SERVICE CALLS

Service Calls:

- There was 0 emergency call out for the month.

3.3 EMERGENCY CALL-OUTS

There was 0 emergency call out for the month.

3.4 CUSTOMER INQUIRIE

There were numerous customer inquiries.

OTHER WORK PERFORMED

Trouble shooting all trains
Trouble shooting of CIP skid and CIP procedure
Inspected distribution mains
Inspected booster station
Flushed air system
Trouble shooting of Ion exchange system
Repair of air compressors
Customer service
Discussed taps with customer and EJ water
Well #8 Repair



Plant staff replacing actuator card on train #2.



Replacing the pump and motor of well #8.



Charles Scharf new meter. Swapped out after complaints of low water pressure



Replaced Charles Scharf meter with new meter and transmitter.

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of October 2022, there were 31 inspections, 3 preventative and multiple corrective maintenance activity completed.

4.2 CORRECTIVE REPAIR

Pulling and cleaning pre filters on all 3 filter trains on weekly basis

CIP train 1,2 and 3

Purged air control system

Air Compressor service

Repair of train #3

Repair of train #2

Flushing distribution mains.

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- Staff member training has been continuous and ongoing.
- Operator and Asst. Operator have been studying for EPA licensing test.

5.2 OPERATIONAL SUPPORT

The following individuals, either on-site or remotely, provided assistance in operation and/or maintenance of the plant during the month of October 2022.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Dan (SCADAware)
- Joe Lee
- Kevin Garmin (SCADAware)

5.3 BUDGET

Table 5.3 Operating Budget

Table 5.3 Budget Table

Budget Table was removed: see clerks report

6. CAPITAL PLANNING

6.1 APPROVED CIP PROJECTS CURRENT STATUS

Pigging project construction complete. Awaiting first pigging before completely releasing contractor.

Benton and Assoc has initiated the planning phase of the Chatham Emergency interconnect. Construction permit has been approved and received. Construction bidding has begun.

Train #2 upgrade repair has been completed and train #2 is back online.

Meter Project progressing, All meter bases and registers are on site.

6.2 DRAFT CAPITAL IMPROVEMENT PLAN

The CIP is a planning document that includes all projects anticipated to exceed \$5,000 in cost over the next five years. The CIP is an ongoing process and will be refined from time to time as projects are completed and new issues are identified.

1. Second Torray filter train has been installed
2. Onsite fuel storage tanks have arrived on site
3. BOP CPU upgrade has been completed
4. Second raw water detention tank
5. SSWC/Chatham interconnect

South Sangamon Water Commission - IL 1670080
October 2022

Date	Pumping Totals					Chemicals Applied					UF Filters			Softeners				Regeneration															
	Time Meter	Hours	Raw Well	UF Plant	HS Lagoon Effluent	Sodium Permanganate	Sodium Bisulfite BW	Sodium Hypochlorite	Ammonium Sulfate	Fluorosiilic Acid	Phosphate	Sodium Bisulfite Pond	Hours since previous backwash	Wash Water	Water Softened	Bypassed	Water		Each day indicate total number of hours since previous regeneration.	Regeneration													
Read	Fiber	Ran	Prod.	(Mgal)	(Mgal)	Am1 Used lbs.	Am1 Used lbs.	Calc mg/l as Cl	Am1 Used lbs.	Calc mg/l as F	Am1 Used lbs.	Calc mg/l as PO4	1	2	3	4	Gal	Gal	Gal														
1	7:00	21.5	1.478	1.358	0.009	1.558	0.063	14	0.23	0.00	360	3.97	82	1.45	29	0.57	8	0.27	17	13.03	0.66	0.66	0.66	38.0	4562	21700							
2	7:00	15.7	1.079	1.013	0.012	0.920	0.035	9	0.20	0.00	222	3.28	53	1.25	20	0.50	8	0.34	16	22.06	0.66	0.66	0.66	40.0	2281	10850							
3	7:00	12.7	0.819	0.771	0.009	0.692	0.038	8	0.23	0.00	220	4.64	53	1.79	19	0.63	11	0.63	18	24.72	0.66	0.66	0.66	63.0	2281	10850							
4	7:00	12.2	0.686	0.617	0.000	0.567	0.048	8	0.28	0.00	192	4.66	46	1.79	17	0.68	8	0.56	17	16.86	0.66	0.66	0.66	56.0	67.0	6843	32550						
5	7:00	16.2	0.788	0.691	0.014	0.629	0.021	7	0.21	0.00	184	3.99	38	1.32	15	0.54	10	0.63	19	43.39	0.66	0.66	0.66	84.0	52.0	4562	21700						
6	7:00	16.5	0.796	0.637	0.000	0.641	0.039	8	0.24	0.00	226	5.32	41	1.54	20	0.71	14	0.86	15	18.65	0.66	0.66	0.66	64.0	4562	21700							
7	7:00	17.0	0.849	0.789	0.009	0.667	0.051	8	0.23	0.00	212	4.03	30	0.91	17	0.58	14	0.83	23	21.81	0.66	0.66	0.66	39.0	52.0	4562	21700						
8	7:00	12.1	0.731	0.602	0.013	0.597	0.035	7	0.23	0.00	190	4.73	31	1.23	15	0.57	14	0.93	16	22.19	0.66	0.66	0.66	56.0	68.0	6843	32550						
9	7:00	12.2	0.628	0.614	0.005	0.526	0.046	6	0.23	0.00	194	4.74	26	1.02	15	0.65	15	1.13	18	18.62	0.66	0.66	0.66	56.0	68.0	6843	32550						
10	7:00	15.5	0.766	0.638	0.016	0.650	0.034	8	0.24	0.00	216	5.07	27	1.01	17	0.60	23	1.40	22	31.23	0.66	0.66	0.66	44.0	47.0	2281	10850						
11	7:00	14.7	0.725	0.663	0.009	0.578	0.040	7	0.23	0.00	198	4.48	29	1.05	17	0.67	67	4.59	20	24.11	0.66	0.66	0.66	61.0	61.0	40.0	6843	32550					
12	7:00	13.5	0.742	0.607	0.017	0.570	0.048	7	0.23	0.00	182	4.49	24	0.95	14	0.58	14	0.64	31	30.74	0.66	0.66	0.66	54.0	38.0	4562	21700						
13	7:00	13.5	0.687	0.641	0.012	0.536	0.056	7	0.24	0.00	192	4.49	27	1.01	15	0.64	8	0.59	18	15.53	0.66	0.66	0.66	43.0	38.0	4562	21700						
14	7:00	14.6	0.896	0.734	0.009	0.877	0.061	13	0.35	0.00	362	7.39	51	1.67	28	0.73	10	0.45	33	26.13	0.66	0.66	0.66	48.0	43.0	4562	21700						
15	7:00	20.6	1.455	1.307	0.007	1.167	0.000	16	0.26	0.00	412	4.72	66	1.21	36	0.70	13	0.44	27	12.90	0.66	0.66	0.66	34.0	28.0	6843	32550						
16	7:00	19.6	1.324	1.228	0.013	1.142	0.058	15	0.27	0.00	394	4.81	58	1.13	35	0.70	16	0.55	20	16.66	0.66	0.66	0.66	31.0	31.0	4562	21700						
17	7:00	21.1	1.456	1.261	0.012	1.162	0.031	13	0.21	0.00	318	3.78	51	0.97	31	0.60	20	0.67	21	32.94	0.66	0.66	0.66	29.0	29.0	4562	21700						
18	7:00	21.1	1.576	1.314	0.008	1.297	0.043	17	0.26	0.00	432	4.93	62	1.13	37	0.65	77	2.35	27	30.00	0.66	0.66	0.66	118.0	29.0	24.0	9124	43400					
19	7:00	21.6	1.807	1.558	0.020	1.426	0.088	17	0.23	0.00	428	4.72	67	1.03	35	0.58	90	2.50	37	20.26	0.66	0.66	0.66	30.0	28.0	4562	21700						
20	7:00	19.2	1.615	1.405	0.009	1.279	0.066	16	0.24	0.00	398	4.25	63	1.08	34	0.61	89	2.75	30	16.66	0.66	0.66	0.66	55.0	32.0	68.0	6843	32550					
21	7:00	16.9	1.322	1.242	0.015	1.134	0.057	2	0.04	0.00	409	4.94	69	1.33	41	0.82	19	0.66	13	10.98	0.66	0.66	0.66	28.0	28.0	2281	10850						
22	7:00	21.1	1.580	1.355	0.004	1.368	0.035	0	0.00	0.00	450	4.98	69	1.22	45	0.74	9	0.26	14	19.42	0.66	0.66	0.66	0.025	0.886	0.469	80.0	29.0	4562	21700			
23	7:00	21.5	1.703	1.521	0.013	1.427	0.040	14	0.20	0.00	376	3.71	60	0.95	38	0.61	10	0.28	13	15.44	0.66	0.66	0.66	57.0	40.0	66.0	6843	32550					
24	7:00	19.3	1.498	1.275	0.016	1.255	0.026	17	0.27	0.00	420	4.94	60	1.13	49	0.88	12	0.38	16	30.00	0.66	0.66	0.66	0.016	0.833	0.442	45.0	28.0	4562	21700			
25	7:00	21.5	1.640	1.462	0.013	1.420	0.040	16	0.23	0.00	448	4.59	72	1.18	43	0.69	13	0.36	10	11.88	0.66	0.66	0.66	0.026	0.956	0.506	42.0	52.0	30.0	6843	32550		
26	7:00	20.0	1.711	1.497	0.012	1.368	0.072	14	0.20	0.00	418	4.19	70	1.12	42	0.70	14	0.40	14	9.31	0.66	0.66	0.66	0.053	0.978	0.519	22.0	30.0	28.0	25.0	9124	43400	
27	7:00	20.3	1.588	1.377	0.017	1.325	0.055	15	0.23	0.00	378	4.11	60	1.04	38	0.67	16	0.48	13	11.26	0.66	0.66	0.66	0.041	0.900	0.477	29.0	32.0	31.0	6843	32550		
28	7:00	19.0	1.557	1.362	0.013	1.248	0.087	17	0.26	0.00	407	4.48	56	0.99	42	0.77	31	0.98	13	7.74	0.66	0.66	0.66	0.072	0.890	0.472	55.0	32.0	28.0	68.0	6843	32550	
29	7:00	19.5	1.593	1.387	0.012	1.278	0.076	9	0.14	0.00	408	4.41	36	0.62	42	0.75	4	0.12	18	11.42	0.66	0.66	0.66	0.066	0.907	0.480	36.0	27.0	4562	21700			
30	7:00	18.8	1.538	1.377	0.011	1.264	0.080	19	0.30	0.00	500	5.44	22	0.38	52	0.94	10	0.31	17	10.74	0.66	0.66	0.66	0.066	0.900	0.477	29.0	31.0	25.0	68.0	6843	32550	
31	7:00	21.6	1.776	1.531	0.019	1.428	0.084	14	0.19	0.00	350	3.43	84	1.32	37	0.59	9	0.25	20	11.48	0.66	0.66	0.66	0.074	1.001	0.530	36.0	26.0	4562	21700			
Total	546.6	38,422	33,774	0,348	31,634	1,869	348	8,899	0	0	10,096	141,099	1,583	35,833	996	20,601	863	27,044	606	606.35	1,338	22,075	11,689	757	734	698	731	18,789	74,850				
Ave.	17.7	1,239	1,089	0.011	1,020	0.054	11.2	0.22	#DIV/0!	0	326	4.55	51	1.16	30.2	0.66	21.4	0.87	19.5	19.56	0.66	0.66	0.66	0.66	0.043	0.712	0.377	47.3	52.4	38.8	36.6	5077.06	24,150
Max	21.6	1,807	1,558	0.020	1,427	0.100	19.0	0.35	0	0	500	7.39	84	1,757	52	0.94	40	4.59	37	43.39	0.66	0.66	0.66	0.066	1.018	0.540	80.0	118.0	64.0	67.0	9,124	43,400	
Min	12.1	0.628	0.602	0.000	0.526	0.021	0.0	0.00	0	0	182	3.28	22	0.38	14	0.50	1	0.07	10	7.14	0.66	0.66	0.66	0.016	0.933	0.209	22.0	26.0	28.0	24.0	0	0	

Identify that the information in this report is complete and accurate to the best of my knowledge.

Reported by: _____
Date: 11/3/2022

Illinois Operator Certification IL: 253479999

Date: 10/26, 10/27

Date: 10/26, 10/27

